



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,802	02/28/2002	Mark Howard Giammattei	RD-27809-7	7858

6147 7590 03/17/2005

GENERAL ELECTRIC COMPANY  
GLOBAL RESEARCH  
PATENT DOCKET RM. BLDG. K1-4A59  
NISKAYUNA, NY 12309

EXAMINER

RAO, G NAGESH

ART UNIT	PAPER NUMBER
----------	--------------

1722

DATE MAILED: 03/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/084,802	<b>Applicant(s)</b> GIAMMATTEI, MARK HOWARD	
	<b>Examiner</b> G. Nagesh Rao	<b>Art Unit</b> 1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 29-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 29-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 29 rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi (US 6,179, 459 B1).

Kobayashi 459 teaches a twin extruder as seen in figure 1 where there is an enclosed chamber with a left side wall (reads on first sectioning wall) and right side wall (reads on second sectioning wall) whereby a lower wall extends out of the right side wall in a contoured like manner, and a pair of screw extruders running through the wall perimeter containing a kneading section (6a and 6b) which is read as a type of transition section followed by a discharge port (8).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
2. Claims 30-31, 33-34, and 40-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi (US Patent No. 6,179,459 B1) in view of Watts (US Patent No. 4,443,109).

From the aforementioned Kobayashi 459 teaches an extruder transition section device with a discharge port, but lacks the specific teaching to incorporate the device in between two compounding extruder apparatuses.

Watts 109 teaches an apparatus for continuous feeding, mixing, and blending, where it can be seen in figure 1 are two sets of extruder compounding apparatuses (28 and 32) are separated by a hopper transition device (11), allowing for the ability of materials to function with each other or be separately autonomous.

It would therefore be obvious to one skilled in the art to attach Watts 109's two sets of extruder compounding apparatuses onto Kobayashi 459 transition sectional device in order to propagate a more continuous flow of material between the two extruder apparatuses, resulting in a more ergonomic design for the overall apparatus.

3. Claims 32, 35, and 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi (US Patent No. 6,179,459 B1) in view of Watts (US Patent No. 4,443,109) in further view of Lowe (US Patent No. 5,259,671).

From the aforementioned hypothetical combined teachings of Kobayashi 459 and Watts 109 the devices combined have the capability of enacting in a manner similar to that of the claimed invention.

However both references lack the teachings of incorporating disconnectable couplings that would permit the two extruder apparatuses from Watts 109 to be disconnected from the extruder transition section taught by Kobayashi 459.

Given the related art of extruders and mixers, Lowe 671 teaches an assembly apparatus including an extruder and mixer that also entails the teaching of a disconnectable coupling (Quick-Disconnect Coupling Columns 7-10). Lowe 671 elaborates on coupling usage for maintaining concentric alignment and torque capabilities.

It would be obvious to one skilled in the art to employ the teachings of Lowe 671 into that of Kobayashi 459 and Watt 109 to enable that the extruder devices can be aligned with each other in between the mid-transitioning extruder device, but as well have the ability to be quickly disassembled from each other in the event of repairs or having to replace one of the extruder apparatuses when one fails but not the other.

Furthermore it is noted based on the prior art of screw extruders to conceive a device similar to that of applicant's claimed invention. In the extruder art it co-rotating and counter-rotating double screw configurations are very well known and used. Kobayashi 459 shows in its art in figure 1 the use of a double screw configuration, for more thorough mixing of materials as well faster processing ability.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 29-31, 33-34, and 36-43 rejected under the judicially created doctrine of double patenting over claims 1-16 of U. S. Patent No. 6,572,253 B2

since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

Silvi et. Al (US Patent 6,572,253 B2) was a co-pending application along with applicant's patent application. It was determined by Silvi 253's claim language for a system to compound silicone compositions that the claims directed towards the structural limitations of the apparatus read on the claim language of the current application in review.

Silvi 253's claim 1 reads on claims 29-31, 33, 34

Silvi 253's claim 9 reads on claim 36

Silvi 253's claim 10 reads on claim 37

Silvi 253's claim 11 reads on claim 38

Silvi 253's claim 12 reads on claim 39

Silvi 253's claim 13 reads on claim 40

Silvi 253's claim 14 reads on claim 41

Silvi 253's claim 15 reads on claim 42

Silvi 253's claim 16 reads on claim 43

For example applicant's claim 29 states:

“An extruder transition section, comprising an enclosed discharge chamber defined by a first sectioning wall, a second sectioning wall and a contoured lower wall that transitions toward a discharge port and a shaft that extends through said first sectioning wall, traverse said chamber and extends through said second sectioning wall.”

Silvi 253's claim 1 includes the following:

“...a transition section, said transition section comprising an enclosed discharge chamber defined by a first sectioning wall, a second sectioning wall and a contoured lower wall that transitions toward a discharge port and a shaft that extends through said first sectioning wall, traverses said chamber and extends through said sectioning wall.”

Another example is applicant's claim 33 which states:

“An extruder transition section, said extruder transition section connecting an upstream compounding apparatus and a downstream compounding apparatus, said extruder transition section comprising an enclosed discharge chamber defined by a first sectioning wall, a second sectioning wall and a contoured lower wall that transitions toward a discharge port and a shaft that extends through said first sectioning wall, traverses said chamber and extends through said second sectioning wall.”

Silvi 253's claim 1 states the following:



“A system for compounding filled silicone compositions, said system comprising: a first compounding apparatus; and a second compounding apparatus that shares a common shaft with said first compounding apparatus; wherein said second compounding apparatus is sequential to and contiguous with said first compounding apparatus, said first compounding apparatus and said second compounding apparatus being separated by a transition section, said transition section comprising an enclosed discharge chamber defined by a first sectioning wall, a second sectioning wall and a contoured lower wall that transitions toward a discharge port and a shaft that extends through said first sectioning wall, traverses said chamber and extends through said second sectioning wall.”

It is apparently clear that the language of both these claims read on each other and are essentially claiming the same thing. Also note that Silvi 253's language towards silicone compositions bears no weight, since it is interpreted as a recitation of intended use, and that the apparatus merely be capable of processing the material.


Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to G. Nagesh Rao whose telephone number is (571) 272-2946. The examiner can normally be reached on 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin Utech can be reached on (571) 272-1137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GNR

  
BENJAMIN L. UTECH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700